

Dear Chairwoman Clyburn, Commissioners Pai and Rosenworcel:

On behalf of the Lexington Institute, a nonpartisan think tank based in Arlington, VA, I am writing regarding your Notice of Proposed Rulemaking on Modernizing the E-rate Program for Schools and Libraries (Proceeding #13-184).

According to a 2010 FCC survey, almost 80% of US schools have insufficient Internet infrastructure to meet current digital learning needs. We believe that the most fundamental problem is lack of adequate access to broadband Internet connections. Schools that fully integrate technology into their instruction, and inform it with rapid and actionable data to help teachers guide instruction are producing powerful educational outcomes, particularly in closing achievement gaps in high-poverty schools. The growth of such high-quality blended learning models, such as those employed at schools including KIPP Empower in Los Angeles or Carpe Diem in Indianapolis, across public education depends entirely on schools having reliable adequate broadband internet access.

As such, we commend the commission's goal to modernize the E-Rate program to provide all schools and libraries with affordable access to 21st Century Broadband that supports Digital Learning. We further ask that the Commission use this opportunity to explicitly focus the E-Rate program on supporting technology that improves teaching and learning for all students.

1. Explicitly update E-Rate guidelines to focus the program's resources on broadband access, and deprioritize or exclude less relevant, dated telecommunications technology like telephone systems.

Other programs that make use of the Universal Service Fund have moved to modernize in recent years. For example, with the inception of the Connect America Fund, the USAC shifted the focus of the High Cost Program from supporting voice networks to supporting and expanding broadband availability. We applaud this move and believe a similar pivot would benefit the E-Rate program, by:

(A) Revising the E-Rate language to explicitly state that the focus has moved from telecommunications in general to broadband access in specific; or (B) creating a fund within the E-Rate program dedicated to supporting broadband access.

2. Provide clear, forward-thinking guidance on bandwidth rates and access to funds to ensure that all schools have broadband connections that meet current needs for teaching and learning, and stand them in good stead for inevitable growth in bandwidth requirements.

In 2008, the State Educational Technology Directors Association released a report outlining the need for high-speed broadband access for successful teaching and learning in the 21st century. Chief among the report's recommendations was Internet connection rates of at least 100Mbps for every

1,000 students/staff in a school. More recently, EducationSuperHighway, a national non-profit organization dedicated to ensuring that every public K-12 school has adequate bandwidth, projected that by 2017, minimum bandwidth requirements will grow to 1Gbps per 1,000 students/staff. Revisions to the E-Rate program should adopt a targeted bandwidth rate of 1Gbps per 1,000 students/staff as the standard for adequate broadband access in schools.

3. Update funding formulas and acceptable uses of E-Rate funds to prioritize expenditures directly related to classroom instruction.

High-quality blended learning is a trend that has seen its growth to date primarily within the charter school sector. But it is beginning to rapidly expand to traditional public schools, as federal education officials have noted. Based upon the powerful results being documented in schools using these instructional models, the E-Rate program should attempt to ensure that traditional public schools also be able to move to blended models rapidly. This could be achieved by:

- (A) Systematically identifying and removing significant obstacles to the expansion of blended-learning in traditional public schools; and
- (B) Prioritizing funding to support expenditures for technology that enables blended-learning in all schools, and especially to supporting adequate and reliable broadband access.

4. Update funding formulas to ensure that students in high-poverty areas, both rural and urban, attend well-connected schools.

In America, people living in poverty have considerably less internet access than their wealthier peers. A 2011 Pew Internet survey revealed that only 41% of households with annual income under \$30,000 have high-speed broadband Internet access, whereas 89% of households with annual income over \$75,000 are connected. As income levels and educational attainment are inextricably linked, it is also worth noting that only 22% of adults without a high school diploma have broadband connections, whereas high school and college graduates have access at 52% and 85% respectively. This contributes to rampant inequalities by compromising the access to online educational opportunities available to children growing up in these households. A modernized E-Rate program could address these gaps by:

- (A) Tying funding formulas to student poverty rates, irrespective of the urban or rural status of a school;
- (B) supporting expenditures on technology that increase access to broadband connectivity for high-poverty students outside the traditional classroom setting and hours

If I can be of assistance or if you have any questions, please don't hesitate to contact me at 703.522.5828. Thank you.

